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(54) Title: THREE TIME POINT LUNG CANCER DETECTION, DIAGNOSIS AND ASSESSMENT OF PROGNOSIS

(57) Abstract: A malignancy classification method and medium for classifying a region of lung tissue are disclosed. The classifying includes: setting time points T1 and T2 measured from injection of a contrast agent. T1 represents a wash-in time point for malignant lung tissue at which a first concentration value of the injected contrast agent is substantially equal to or near a peak for injected contrast agent concentration in the region of lung tissue. Patient concentration values of the contrast agent for the area of lung tissue at time points T1 and T2 are obtained, and a malignancy classification for the region of lung tissue is provided by comparing the obtained sample concentration values with a predetermined malignancy profile. A visual representation of the malignancy classification of the region of lung tissue is outputted.

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